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ABSTRACT

The Pendleton Project is an interagency/interdisciplinary program providing outclient, day treatment, and residential services to 6- through 12-year-old children who exhibit serious and persistent behavior problems. The objective of the project is to implement a comprehensive intervention program for the child by means of both direct treatment and referral to other appropriate community resources. Outclient services focus on counseling parents and teachers in alternative methods of child management. Intervention effectiveness is monitored by means of behavioral data. After 3 1/2 years of operation, treatment success is 76% at termination of active intervention services with 58% of the children behaving acceptably at 12-month followup. The treatment effectiveness data, in combination with relatively short treatment time required, strongly support the use of intensive, closely monitored intervention procedures with this population. Interagency participation in the project appears to have significant impact on treatment effectiveness. The interagency model does create problems in financial management and personnel matters and requires assertive public relations efforts for community acceptance, but treatment effectiveness data supports continuation of the model. (Among appendixes are a table of referral statistics, a diagram of the model, and information on termination and followup.) (Author/SBH)

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INTERAGENCY OUTCLIENT SERVICE DELIVERY TO YOUNG CHILDREN AND THEIR FAMILIES

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In recent years, there has been an increasing concern about the rapid increase in youth crimes. Senator Birch Bayh's (D-Indiana) Senate Subcommittee on Juvenile Delinquency reported 500 million dollars worth of property destruction by school children in 1973 and an estimated 70,000 physical assaults on teachers and hundreds of thousands on students each year (Pooley, 1977).

The growth of the delinquency problem is reflected in the court statistics of the two cities of Chesapeake and Virginia Beach, Virginia, an area experiencing a rapid escalation of population (261,686 in 1970) with 38% (101,037) of that population below the age of 17 years.

Virginia Beach shows an increase of 324 official delinquency cases between fiscal year 1969 and fiscal year 1970--a 26% increase. During the same period, unofficial cases increased by 659 bringing the total unofficial referrals to an all time high of 920. Statistics for Chesapeake for fiscal year 1970 show an increase of 162

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prehearing investigations over the previous year for a total of 498 investigations, and an increase of 127 cases on probation for a total of 256 cases on probation. Statistics for Chesapeake also indicate that 489 cases received "other services" related to drug abuse, counseling, parental support and counseling, school problems, and other child centered services.

The growing seriousness of delinquency problems within the two-city area is further reflected in the following statistics. In the fiscal year 1969, 71 children below the age of 13, and 443 children above the age of 13, required detention care. In fiscal year 1970, there were 93 children below 13 years and 656 children above 13 placed in detention--an increase of nearly 46%. The local departments of welfare indicate a joint total of 447 children in foster care. Such cases are reflective of family adjustment problems and tend to become delinquency cases if appropriate treatment is not available. The school divisions in the area show a total of 1,609 referrals for learning and behavioral problems in 1970. Each of these problems tends to beget each other and, in the absence of timely remedial intervention, spawns juvenile delinquency. The social histories of children before the juvenile court consistently reflect the instance of early learning and behavioral adjustment difficulties. The Virginia Beach Free Clinic, a drug abuse contact and referral agency, reports 3,500 contacts with youngsters predominantly below age 20 in reference to drug related problems which frequently appear as juvenile court cases.

This statistical data is only suggestive of the extent of the delinquency problem. Many adjustment problems experienced by children and families go unnoticed officially, and are not referred for service due to lack of identification, referral techniques, and adequate community resources for effective intervention. These three deficiencies are the task objective of the Pendleton Project and are the basic justification for the need for this action. This two city area has no treatment facility or service program for hard to reach and hard to treat children whose antisocial behavior falls beyond the perimeters of categorical agencies. For want of intervention, delinquency is both begotten and recycled. This Pendleton Project is designed to intercept the child in trouble before he is enmeshed in the juvenile justice system to the point of being committed (Pendleton Project Grant Application, 1973).

Early Identification of the Child in Trouble

One classic study of youth exhibiting serious behavior problems was the 15 year research effort with 500 delinquent and nondelinquent boys by Sheldon and Eleanor Glueck (1950). In their longitudinal research, extensive analysis of historical, familial, social, and educational information about each youth was summarized. While the average age of the Glueck sample was 14 years, there were many factors in the delinquent youths' earlier background which distinguished them from the nondelinquent comparison group and that might be considered indicators of those children who are headed for trouble in the future. In an examination of their past, Glueck and

Glueck found that 48% of the delinquents showed that "first clear signs" of "social maladaption (i.e., stealing, truancy, destructive mischief, stubbornness, tantrums, disobedience, running away, stealing rides, junking, sex affairs, and the like..." (p. 28) by eight years of age and 87% of them showed these signs by age eleven. In the school environment, there again were early signs of misbehavior. Serious or persistent misbehavior, "truancy, stealing, persistent attempts to attract attention, persistent inattention or mischievousness, disobedience, defiance, stubbornness, carelessness, lying, underhandedness, smoking, and sexual misconduct" was evident in the record of 478 (95.6%) of the 500 delinquent youths as compared to 86 (17.7%) of the 500 nondelinquent youths. Of these 478 delinquents, 18.5% were markedly misbehaving in kindergarten and first grade while nearly three-fourths of them (74.9%) had shown clear signs of serious problem behaviors by the fifth grade. These first school misbehaviors took the form of "disobedience, unruliness, stubbornness, temper tantrums, persistent inattention, showing off, attracting attention, mischievousness, carelessness, lack of self-control, lying, smoking, sneaking, indecent exposure, and stealing" (p. 148).

Not only were the delinquent youths exhibiting persistent problem behaviors in the home, school, and community but also the families of these youths had had extensive contact with social service agencies since the marriage of the parents. The average number of different social agencies that had served the families of delinquents was 11.66%,

nearly double the average in the families of the nondelinquents (M=6.68), (p. 103). The nature of problems requiring these services ran the gamut of those provided by human service agencies. Financial assistance was required by 90.2% of the delinquent families as compared to 69.8% of the nondelinquent; help with domestic (marital) difficulties was required in 80.4% of the delinquent families as compared to 47.2% of the nondelinquent; 84.6% of the delinquent families and 44% of the nondelinquents needed help in situations stemming from child neglect and abuse; 88.8% and 63.4% of the delinquent and nondelinquent families had to have free or partially free health care from hospitals or public health agencies or visiting nurses. The delinquent families were in far greater need (69.2%) of mental health/psychiatric services or schools for the retarded than were the families of nondelinquents (19%). Involvement with free or inexpensive recreational programs were needed by a large percentage of both delinquent (78.8%) and nondelinquent (68.8%) families. Finally, assistance in the area of vocational and employment problems were needed in one in four (25.4%) of the delinquent families and 9% of the nondelinquent families (p. 104).

The Glueck and Glueck data provide a solid foundation for the identifying referrals and the conceptual model of treatment service delivery of the Pendleton Project (Dowling, 1973). The Pendleton Project is an interagency, community based treatment program serving the Cities of Chesapeake and Virginia Beach, Virginia. Its target population is six through twelve year old children who

are displaying persistent and serious behavior problems in the home, school, and/or community and appear to be headed for more serious trouble unless some intervention occurs. The project has been in operation since August, 1973 and has served 834 referrals as of February 28, 1977 (see Appendix A). Males comprise 85% of these referrals and thus the data that follows reflects, in large part, the characteristics of male referrals.

There are strong indications that the Pendleton target population of six through twelve year old children with serious and persistent behavior problems exhibit many of the same types of problem behaviors that were noted in the records of the Glueck and Glueck delinquent group when they were between the ages of six and twelve. Of the 753 children referred to Pendleton through November 30, 1976, 26.5% have had actual court or police contact for status offenses (6.5%) criminal offenses (14.2%), or both status and criminal offenses (5.5%). Another group of referrals (35%) have exhibited potential status behaviors (15.8%), potential criminal behaviors (10.9%), or both potential status and criminal behaviors 8.3%) which, if detected, would have resulted in police or court contact. Another one third (31.9%) of the children referred have displayed serious and persistent disruptive behaviors but have not committed potential or actual offenses. Thus, more than 61.8% of Pendleton referrals display actual or potential status or criminal behaviors. The remainder of the referrals (38.2%) have been seriously disruptive in the home, school, and community (Pooley, 1977).

What are the types of problem behaviors for which these children are referred. A sample of 91 children referred between September 9, 1974 and May 24, 1976 revealed the target behavior categories as shown in Table 1.

TABLE 1

Target Behavior Areas		%	cp
I.	Aggression: physical aggression, fighting, destruction	17.9	17.9
II.	Defiance: backtalk, tantrums, defies authority	20.1	38.0
III.	Interpersonal Relations: attention seeking constantly	2.7	40.7
IV.	Self-control: blurts out, out of seat, off task	15.6	56.3
V.	Honesty: stealing, lying	19.6	75.9
VI.	Maturity: inability to accept responsibility	5.0	80.9
VII.	Academic Performance Related Behaviors: incomplete work, not following directions	9.0	89.9
VIII.	Others: poor health habits, bedwetting	10.1	100.0

TABLE 1. Target behavior areas collected from a sample of subjects (N=91) with complete behavior frequency data collected between September 9, 1974 to May 24, 1976.

Clearly, the target behavior categories encompass many of the behavioral examples that Glueck and Glueck refer to in their delinquent group as "the first clear signs of social maladaption" in the community (p. 28), and in the school (p. 148).

If we assume that there is a similarity in behavioral patterns between Glueck delinquent group at six to twelve years of age and the Pendleton target population, then there is likely to be a need for a multitude of services (Pendleton Project Grant Application, 1973). As was mentioned above, the families in which the delinquent boys resided had been involved, on the average, with more than eleven different social service agencies since the marriage of their parents. These families were clearly multiproblem families. The conceptual model on which the Pendleton Project is based provides for the delivery of comprehensive intervention services to each child. Nine human service agencies from the two-city catchment area support the project at both the Management Board and direct service level. The Pendleton Project Management Board is comprised of the state and local directors of the participating human service agencies. This board establishes policy for the project and acts in an advisory capacity to the project director and staff. The outclient service delivery team (Project Services Team) is made up of one social worker from both the Chesapeake Social Service Bureau and the Virginia Beach Department of Social Services; one educational specialist from both the Chesapeake and Virginia Beach public school systems; one probation officer from both the Virginia Beach and the Chesapeake Juvenile Court Services; one public health nurse who is an employee of the Virginia Beach Public Health Department; and one psychiatric social worker from Comprehensive Mental Health Services of Virginia Beach. The Residential Team is an interdisciplinary

team providing behavioral treatment and diagnostic/prescriptive/ remedial services on a day care and residential basis to the more difficult children referred to the project. It is described in detail in Eun, Pooley, and Shea (1977).

The Pendleton Project Diagnostic Team is comprised of the project director who is an educational psychologist not affiliated with any agency but responsible to the Project Management Board; a clinical psychologist employed by Comprehensive Mental Health Services of Virginia Beach; an educational psychologist who is an employee of Chesapeake Public Schools; a medical consultant contracted through Virginia Beach Department of Public Health; and psychiatric consultants on a contractual basis.

The clinical psychologist supervises the Outclient Service Delivery Team and the educational psychologist is the supervisor of the Residential Treatment Team. The project director, administrative assistant, outclient team and residential team supervisors make up the internal management team for the project. The management design is based on Rensis Likert's link-pin theory of internal management as described in Pooley (1975).

Various portions (20%-100%) of the salaries of those staff with joint appointments (i.e., a local human service "parent" agency and Pendleton) are reimbursed by the parent agency with the difference in salary being made up of grant or state sources of funding. This financial arrangement formalizes the linkage between Pendleton and the other human service agencies (Pooley, 1974).

In summary then, a two-city interagency/multidisciplinary project has been established to provide outclient, day treatment, residential and referral services to six through twelve year old children who exhibit persistent behavior problems.

Are these children from multiproblem families? Three sources of data: (a) referral source to Pendleton, (b) frequency of prior contact with other human service agencies, and (c) agencies and other resource persons to which Pendleton refers its clients as part of the comprehensive intervention plan - shed light on this question. As of November 30, 1976, three-fourths of the 753 Pendleton referrals were from other agencies: 39.7% from the public schools; 11.8% from the departments of social services; 12.2% from the juvenile court services and youth bureaus; 3.2% from the mental health services; 1.1% from the departments of public health; 4.3% from private human service providers; 2.2% from other sources. Parents referred their children in 25.5% of the cases, often at the suggestion of other agencies (e.g., school) involved with the child (Pooley, 1977).

A second source of data is the number of agencies previously involved with the child. A survey of 196 referrals between August, 1973 and March 14, 1975, reveals that 185 (94%) of the children had been involved with another human service agency prior to referral to Pendleton. Of these 185, 53% (N=97) had been involved with two other agencies; 10% (N=19) had been involved with three other agencies; 2% (N=2) had been involved with four agencies, and 1% (N=4) with five or more agencies. This data must be viewed as a

conservative estimate of the extent of problems that the family has experienced since it only reflects data gathered on the referral child while disregarding agency contact by other members of the family.

A third source of data is the resources to which Pendleton refers the child and/or the family in accordance with the comprehensive treatment program developed. In 42% of the cases, the child and/or family is referred to another resource for either a selected service (e.g., physical examination) while Pendleton continues to work on the problem behaviors or the family is referred totally to another resource for more appropriate services (e.g., marital counseling) (Pooley, 1977). In many cases, the family is continuing to receive other services from the agency that referred the child (see Table 2, p. 29).

These data strongly suggest that the referred child lives in a multiproblem environment and thus provides support for the interagency approach to the delivery of services.

Criterion for Referral of Children

If we can accept the above data as evidence that the children identified are likely to be experiencing multiple problems, and may have been involved with a variety of human service agencies, we are then faced with the problem of defining criterion for referral in terms that may be understood by potential referral sources. For example, if a child has been previously involved with a mental health agency, the juvenile court, and the public school special education division, he may have been diagnosed

respectively within each system as an antisocial personality, incorrigible, and emotionally handicapped. The Glueck and Glueck data provide some guidelines here in that their early indicators of "social maladaption" is the child's behavior. The common element in each diagnostic procedure is the child's behavioral repertoire (e.g., gross motor behavior, verbal behavior, test taking behavior, etc.).

The criterion for referral to Pendleton is his behavior. If the child is exhibiting problem behaviors in the home, school, or community, then Pendleton is a resource for coaching parents and teachers in alternative child management procedures. The parents and teachers utilize these new procedures in approaching the child.

As is apparent from the target behavior categories described earlier, the aggressive, defiant, child who lacks self-control steals and lies has been the most frequent referral to Pendleton. These are the types of behaviors that get the adult's attention quickly. Differential treatment data with youth at the Robert F. Kennedy Youth Center, Morgantown, West Virginia (Differential Treatment..., 1970) as well as Cunningham's (1977) analysis of Pendleton research packet data suggest other types of behaviors are important as well.

Diagnostic and Treatment Procedure

When a child is referred to the Pendleton Project, there is a standard diagnostic and treatment process. Referrals are assigned

to one of the seven outclient team treatment agent/case coordinator on the basis of the school district in which the child lives. Each outclient worker is assigned to certain schools (10 schools per worker in Virginia Beach; 8 schools per worker in Chesapeake). This allows each worker to develop rapport in both the school and the community it serves. (This assignment of workers to specific schools was implemented in July, 1976, at the recommendation of several principals in the school systems (Griffith, 1976). Prior to this, cases were assigned to a worker on the basis of available slots in his caseload).

Once the case is assigned, there is a two-week investigation period during which the treatment agent makes one home visit and one school visit to determine the nature of problems in each environment. A packet of research information (see Appendix B) is collected from the parent, teacher, and child during these initial visits and baseline counts are initiated on those target behaviors identified.

Once the target behaviors have been baselined, a treatment plan is written by the treatment agent and discussed with the diagnostic team (diagnostic preview) at the weekly staff meeting. The treatment options, at this point are:

(1) Outclient services in the home and/or the school,

(2) Outclient services by Pendleton with a partial referral to another resource for a selected service (e.g., dental examination),

(3) Residential services for the child while the parents and/or teachers are coached in child management skills by the outclient and residential treatment agents,

(4) Residential services with a partial referral to another resource for a selected service,

(5) Total referral to another source that can provide the appropriate service deemed necessary for the child and/or his family (e.g., referral to school systems' divisions of psychological services and special education for consideration for a more appropriate class placement). (See Table 2).

Three weeks after the diagnostic preview, the treatment plan is reviewed by the diagnostic team to determine the effectiveness of the intervention. If the intervention data suggests that the treatment plan implemented is effective, then that plan is continued with the necessary alterations and refinements deemed appropriate. If the initial treatment intervention is not effective, then any of the four other treatment options may be exercised. At these preview and review time points, the diagnostic team, interagency outclient team and, when appropriate, selected members of the interdisciplinary residential treatment team collaborate to develop a comprehensive treatment plan for the child. Since at any time point there may be an active caseload of 100 cases, preview and review of treatment plans must necessarily be brief, concise, and to the point. Those cases for which the effective treatment interventions have not been developed are discussed in-depth at either the diagnostic team or outclient team weekly staff meeting. In these staffings, treatment agents or resource

staff in other agencies (e.g., teacher, school psychologist, social service worker, etc.) involved with the child may be invited in an effort to develop a coordinated intervention effort.

Comprehensive Intervention Strategies

The Pendleton Project has two major intervention objectives: (1) to develop and implement treatment strategies for effecting a change in the child's problem behaviors in the home, school, and community, and (2) to identify other problem areas which appear to be contributing to the child and/or family's difficulties and make referral to an appropriate resource.

The first objective of the Pendleton Project is to analyze the child's home and school environment and to reeducate, counsel, and coach the parents, teachers, and children in alternative behavior change and coping strategies for solving problems. The early program resource for philosophical and operational procedures was "Project Re Ed," designed in a joint venture by the Tennessee Department of Mental Health and George Peabody College in Nashville, Tennessee (Pendleton Project Grant, 1973). More specifically, Pendleton child management/family counseling procedures rely heavily on the principles derived from the experimental analysis of behavior and learning theory. Diagnostic and assessment procedures of problem areas draw from theories of learning, education, family therapy, and child development.

The major focus of Pendleton's intervention efforts is a change in behavior such that the child is able to function adequately in

his home, school, and community. Thoresen and Anton's (1973) intensive counseling model has provided an excellent framework for implementing and evaluating our intervention efforts. Their approach emphasizes case management by objectives as guidelines for treatment planning. The treatment plan includes specification of target behaviors and baseline measures, behavioral objectives or desired outcomes, specific intervention strategies for attaining each objective, and evaluation procedures for determining when an objective is met (Pooley, 1969). The utilization of target behavior data has many important advantages, two of which are including close monitoring of intervention effectiveness for the individual child and providing a common basis of communication among interdisciplinary treatment.

A basic assumption in a behavioral approach to solving problems is that given the existing conditions, "all behavior makes sense" (Goldiamond, 1974; Schwartz & Goldiamond, 1975). That is to say, if one is aware of the antecedents of, or occasions on which the behavior occurs, then this is a great step toward understanding the purpose, goal, or reinforcer for the behavior. Moreover, if persistent behavioral patterns are analyzed in terms of their antecedents (occasions) and consequences, and it is assumed that these behavioral units (i.e., antecedent-behavior-consequences) occur sequentially over time, then this provides a foundation for understanding both historical and current conditions that have, to a large extent, established the individual's current behavioral

repertoire (Goldiamond, 1974; Schwartz & Goldiamond, 1975; Skinner, 1974).

For example, consider the following behavioral analysis of a child stealing change from his mother's pocketbook.

Antecedent or Occasion #1	Behavior #1	Consequence #1, Antecedent #2	Behavior #2	Consequence #2
No one, especially mom in bedroom where pocketbook is.	Child takes some small change from pocketbook.	No one finds out; mom not missing money.	Child spends money for candy.	Child eats candy.

In this situation, the antecedent #1 conditions (no one near pocketbook) set the occasion for behavior #2 (taking small change from pocketbook) which went undetected by mom (consequence #1). The fact that it went unnoticed by mom (antecedent #2) set the occasion for spending the money on candy (behavior #2) and eating it (consequence #2). The current conditions that account for the stealing behavior are clear. If one empathizes with the child in this situation, one may hypothesize the following historical conditions that have contributed to the stealing behavior: (1) In the past, the child's asking for money has resulted in negative consequences from the mother (e.g., refusal, scolding, guilt inducing explanations, etc.), and (2) the past and present interactions between the mother and child have resulted in considerably more negative consequences for the child than positive ones.

If this behavioral analytic framework is employed in solving problems, it can greatly facilitate the understanding and interventions

with family interactional patterns (Kifer, Lewis, Green, & Phillips, 1974; Johnson, 1977; Chapin & Prizzio, 1976) and classroom environments (e.g., Shows, 1976; Bloomer, 1976) as well as groups (e.g., Shows, 1976) and organizations (e.g., Goldiamond, 1974).

Several case studies will help illustrate how this behavioral analysis framework is employed in developing treatment interventions.

Case Study - Scott

An illustration of a home intervention involves the case of Scott (Prizzio, 1976), a ten year old, fourth grade student who was referred by the Department of Social Services where the case was open for financial assistance services. His parents had been separated for three years and Scott lived with his mother and two siblings. The mother was concurrently being seen in psychotherapy because of personal problems by a psychiatric social worker in the private sector. Academically, Scott was functioning slightly below grade level although his IQ fell in the bright normal range. His referral behaviors were fighting with siblings, lying, back-talking, disobedience, and tantrums. After an eleven day baseline phase in which the mother learned to observe and monitor the frequency of specific target behaviors, she was asked to complete a behavioral analysis form (Shea & Prizzio, 1975) on two target behaviors - crying and fighting. In completing these records, the mother recorded the antecedent behaviors and consequences, each time that either target behavior occurred. The behavioral

analysis data was then discussed in the next meeting with the Pendleton treatment agent/behavior analyst in helping the mother understand that the occurrence of the target behavior was related to its antecedents and consequences.

A behavior analysis of the sequence in Figure 1 reveals that the mother's request to clean his room (antecedent) set the occasion for Scott's crying (Behavior 1) for which the mother yelled at him (consequence). The mother's yelling (antecedent) set the occasion for Scott to start fighting with his brother Bryon (Behavior 2). In the second behavioral sequence, the mother's asking Scott again to clean his room (antecedent) set the occasion for Scott's throwing something and breaking it (Behavior 1). The mother yelled again (consequence) at him. The mother's yelling (antecedent) sets the occasion for Scott to slam the door (Behavior 2) of his room. The mother's attempts at intervention (i.e., yelling) are not effective in getting Scott to respond to her request but rather they result in his direct aggressive behavior toward his brother and indirectly toward her (i.e., slamming door). On the basis of this behavioral sequence, one might hypothesize that (1) in the past, the mother's request of Scott has not resulted in positive consequences for him, and (2) that the mother and child's interactional pattern is resulting more frequently in negative consequences than positive consequences for both parties.

In the next phase of intervention, the mother continued collecting behavioral analysis data and was assigned and quizzed on

reading materials (Living with Children, Pattersen and Guillion, 1968) in order to help her discover alternative methods of responding when the target behavior occurred. As is apparent in Figure 2, she was beginning to understand the importance of consequences, although it had not become established, as yet, as a part of her behavioral repertoire.

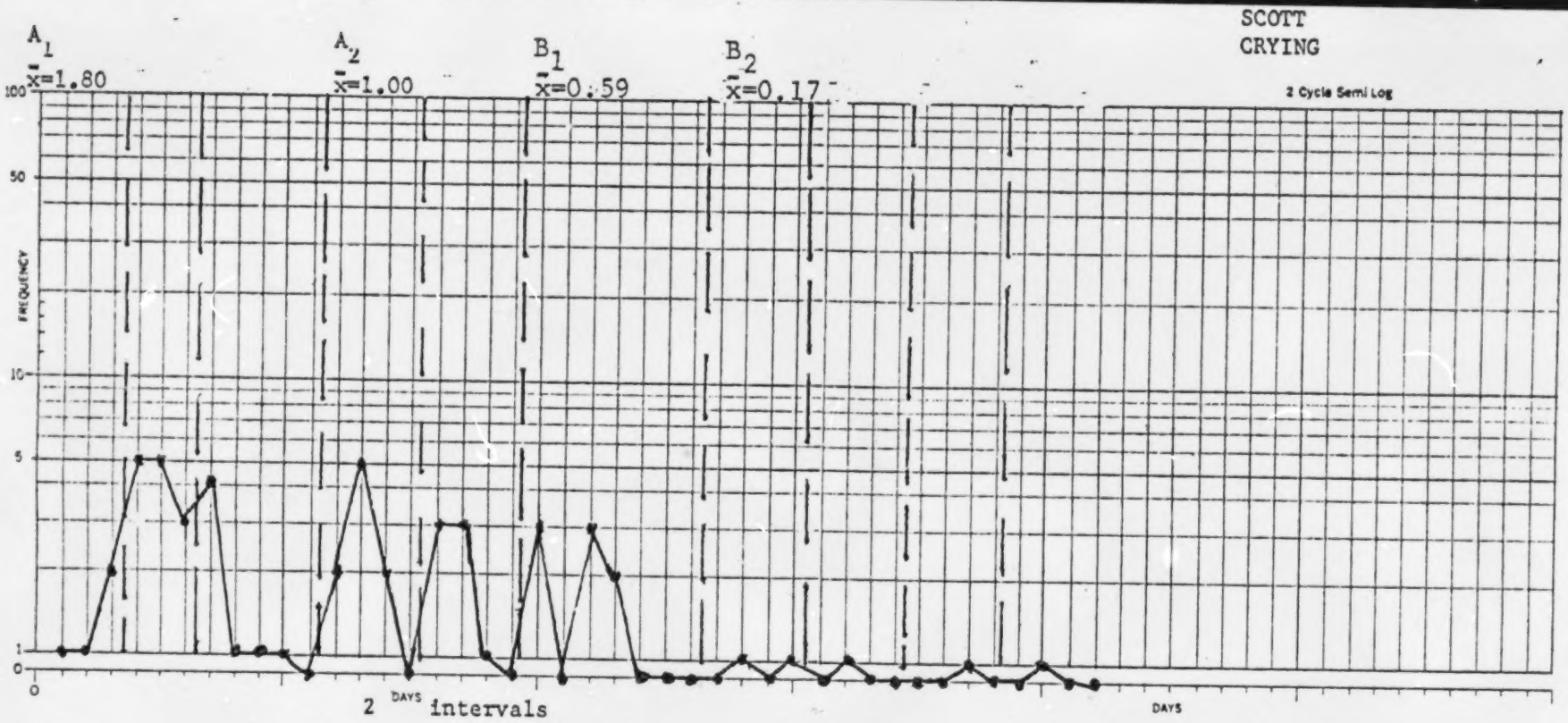
In the final phase of intervention, the treatment agent/behavior analyst helped the parent refine her approach by making suggestions and observations based on his experience in working with similar families. In this sequence in Figure 3, the mother has begun to change her approach to Scott in both the antecedent and consequence phases. Her request is presented in a "softer" tone of voice. When Scott became upset because he was watching TV at the time (Behavior I), her response was to explain under what conditions he could watch TV and the possible negative consequence (i.e., lose his job of cleaning up hairstyling salon). Scott's response to this was to go to the bathroom, cry a little more, and then finally do his work. The mother positively reinforces this behavior with a bottle of pop. She has begun to approach Scott in a softer tone and use explanation and positive consequences to teach him the appropriate behavior. From her comment, "It worked, I feel great" one may assume that Scott's completion of his work and her giving him a positive reinforcement resulted in a positively reinforcing experience for her. This is important for it increases the probability of the mother positively reinforcing her son's behavior in the future.

PAGE #_____ NAME SCOTT

Date_____

ANALYSIS OF EVENTS

Time	Who was present	What happened before	Behavior$_1$	What followed	Behavior$_2$	Comments
FIGURE #1 - December 6, 1975						
A.M.	Me	I asked Scott to get room cleanes - he was not doing.	Cried	I yelled	Started fighting with Bryon	
P.M.	Myself - Children	Repeated	Threw something, broke it.	I yelled, but gave another chance	Slammed door	My temper builds
FIGURE #2 - December 16, 1975						
Evening	Home - Billie A & family	Scott asked if he could go out and pley. Sure, if ~~your duties are done~~	Told Billie he can't breathe, then cried	Billie stepped in and helped get room done. I went in to see if ~~alright, but he pushed~~ clothes under bed	So, I said he didn't do it, ok so it had to be ~~done right. He~~ hit B.T. and it was his fault.	I found it hard to remember to reward when good
FIGURE #3 - January 9, 1976						
After 3:30	Shop	Scott, let's get this shop in some order	Scott got upset because he was ~~watching TV~~	Scott, you can watch TV after. You don't want to lose your job.	Went into bath-room, came out cried and did ~~his work and I~~ gave him a bottle of pop	It worked! I feel great!


SCOTT
CRYING
A1
x̄=1.80
A2
x̄=1.00
B1
x̄=0.59
B2
x̄=0.17
2 Cycle Semi Log
100
50
10
5
1
0
FREQUENCY
0
DAYS
2 intervals
DAYS

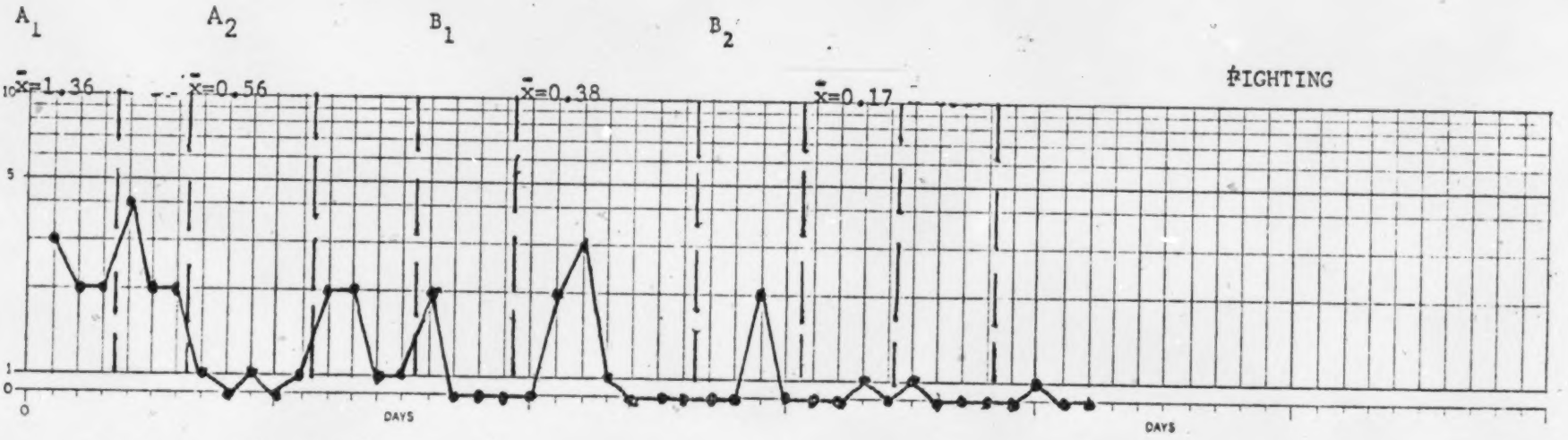

A1
x̄=1.36
A2
x̄=0.56
B1
x̄=0.38
B2
x̄=0.17
FIGHTING
10
5
1
0
0
DAYS
DAYS

Figure 4

As is apparent in Figure 4, both target behaviors decreased significantly from baseline conditions (A)($\bar{X}$ = 1.80/day - crying; $\bar{X}$ = 1.36/day - fighting) to the final phase of intervention (B_2) in which the treatment agent made suggestions to the mother in order to refine her approach ($\bar{X}$ = 0.17/day - crying; $\bar{X}$ = 0.17/day - fighting). As a result of intervention with these two target behaviors, the other referral behaviors also decreased in frequency as the mother began to generalize her skills to those occasions in which these other behaviors occurred. Follow-up at one and five months revealed that Scott continued to function acceptably.

Case Study - Franklin

Franklin (Rice, 1976) is a 12 year old, sixth grade male who was referred by his mother because of fighting, annoying other children, constant attention-seeking behavior, and suspension from the school bus. He is the oldest of eight children and lives with his mother and stepfather. He is the only child in the family who is not a product of the present marriage. His mother receives Aid to Dependent Children from the Social Service Bureau. As a result of the health screening by the Pendleton Public Health nurse, Frank was referred to the Department of Public Health for a physical examination.

Academically, Frank was functioning at the 2.7 grade level equivalent in reading, 3.1 level in language arts, and 3.4 level in math when tested at grade level 4.2. His tested IQ's varied

between the borderline and average range on repeated group tests. The treatment agent, in conjunction with the classroom teacher, determined that Frank needed special reading materials at his level. They persuaded the principal to have him placed immediately in a Learning Disability resource class within the school.

A baseline then taken on the percentage of science classwork completed (number of assignments completed/number of assignments given) revealed that his work completion in science varied from 0% to 100% with a daily average of 37% assignments complete. Since his teachers had assessed that most of his disruptive target behaviors were due to the fact that the difficulty he had in understanding the material (antecedent) set the occasion for his disruptive behaviors which resulted in attention from his peers and the teacher (consequence), no formal behavioral analysis data collection was requested.

The intervention plan chosen was "constructional" in nature (Goldiamond, 1974) in that the treatment agent was focussing on increasing appropriate classroom behavior by positive reinforcement rather than decreasing disruptive behavior. In this case, Frank would earn his attention through acceptable work completion rather than through inappropriate behaviors. Ayllon and Roberts (1975) have shown that reinforcing academic performance will decrease disruptive behavior in class.

Since attention was Frank's reinforcer, the treatment agent set the occasion for Frank to earn this desired consequence by having

him bring a note card from is mother (Bailey, Wolf, & Phillips, 1970; Bloomer, 1976) to his science class (antecedent) on which his teacher rated his daily percentage of work completion (behavior) "good" (76-100%); "average" (51-75%) and "poor" (0-50%). Frank was then praised by his teacher and mother and allowed to play outside after school (consequences) if he received good or average ratings. Less than 51% work completion (behavior) resulted in a "poor" rating and loss of outside privileges after school and no praise.

There was also a category of "good bus behavior" on the daily note. Since a frequency count of disruptive behavior was impossible on the bus, each of three bus drivers rated his behavior "good," "average," or "poor," and this was brought home to the mother. Good or average ratings resulted in the bus driver and mother's praise and daily outside privileges. A poor rating resulted in loss of outside privileges and no praise.

Figure 5 shows the percentage of good plus average ratings in three-day intervals for work completion and bus behavior during baseline and "home note" conditions. As is apparent from the graphs, good plus average ratings for work completion increased from a mean of 33% per three-day intervals during baseline to an average of 88% per three-day intervals during the intervention phase. Similarly, good plus average ratings in bus behavior averaged 100% per three-day interval during the intervention phase. There was, of course, no baseline condition since Frank was suspended from the bus.

It is possible to conceptualize other behavioral interventions (i.e., visible baselines, contracts, token economies, etc.) in a

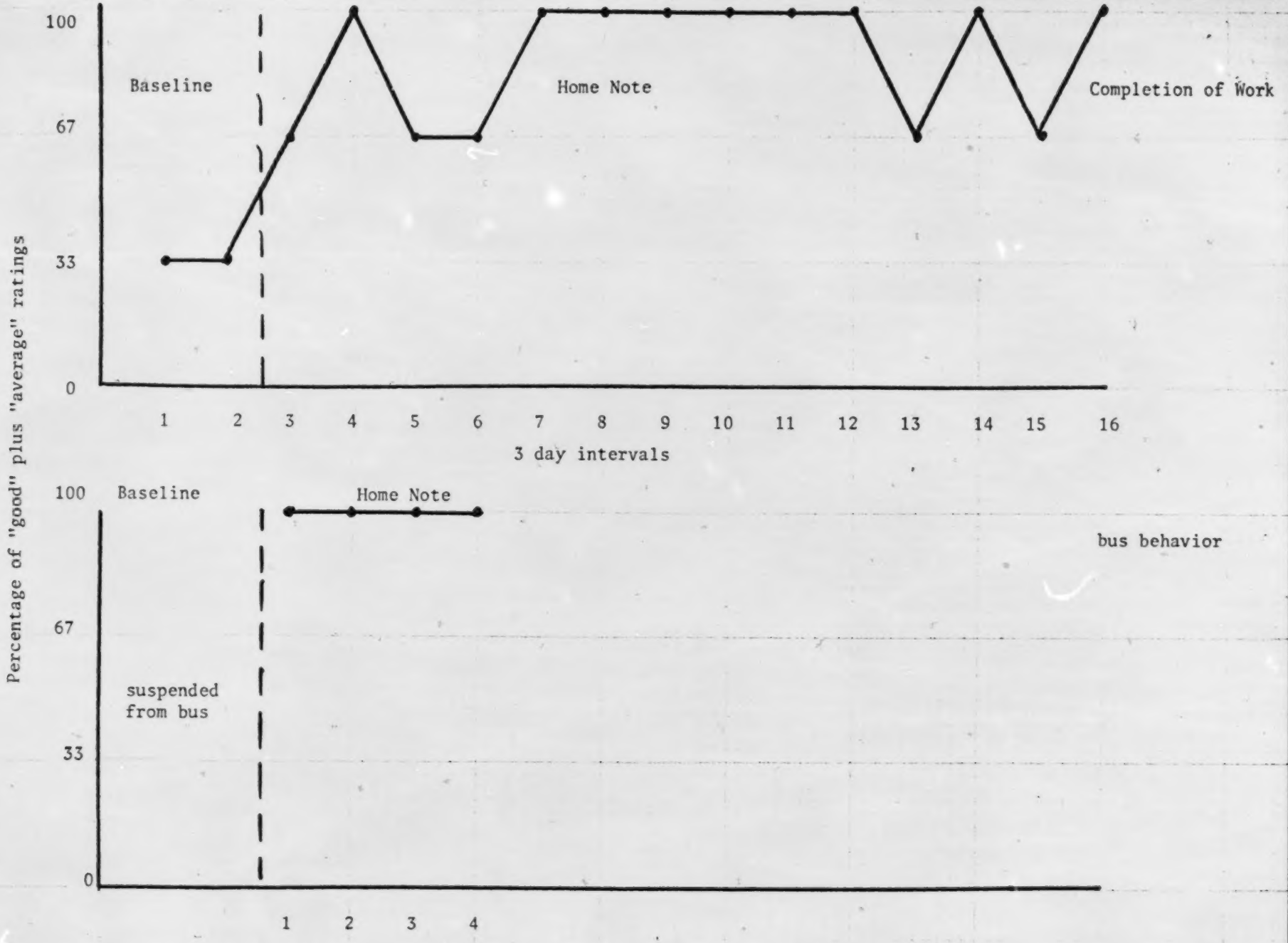

100
67
33
0
Baseline
Home Note
Completion of Work
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
3 day intervals
Percentage of "good" plus "average" ratings
100
Baseline
Home Note
bus behavior
67
suspended
from bus
33
0
1 2 3 4
3 day intervals

Figure 5

similar behavior analytic framework. Such visible interventions supplant the previous antecedent conditions for the target behavior and set the occasion for either a lower rate of occurrence (drl schedule) or a high rate of occurrence of the target behavior or for the occurrence of an alternative more appropriate behavior. In any of the three situations, the change in behavior results in a positively reinforcing consequence.

Evaluation of Treatment Program Effectiveness

A treatment program is considered successful if the objectives determined jointely by the Pendleton treatment agent and the parent and/or teacher are met such that (1) the child is able to function acceptably in his natural environment (i.e., home and school), and (2) the parent or teacher has been taught procedures for managing the child constructively. Intervention data collected by parents and teachers, their verbal reports, and the treatment agent's opinion of treatment progress determine when the two criterion are satisfied (Pooley, 1976). As of December 6, 1976, the project had received 753 referrals and terminated 653 of them. Figure 6 presents the summary of treatment effectiveness at termination

Summary of Treatment Effectiveness

Successful Termination	Children Functioning Acceptably at Follow-up Contacts:			
	1 month	5 months	12 months	24 months
76%	68%	59%	58%	42%

and follow-up contacts (see Appendix C) for termination and follow-up categories and formulas for successful termination and follow-up). Our statistics indicate that Pendleton's approach is both effective and enduring for at least one year in the majority of cases. In the 102 cases (24%) that have not had successful terminations, the main problems seem to be in our inability to motivate the parents (74.5%: Termination Categories C + O) or the school personnel (20.6%: Terminations Categories D + E) to implement the intervention program consistently. The follow-up statistics also reflect problems we have in motivating clients to utilize intervention recommendations should the same or similar problems reoccur in the future.

A second measure of treatment effectiveness is a subset of the above criteria for termination data, namely, the change in the frequency of target behavior from baseline to intervention conditions. A sample of 91 cases with complete behavior frequency data during baseline and intervention conditions was analyzed. The average frequency of target behaviors during baseline conditions was 2.33 per day in comparison to the average frequency of 0.548 per day during the last week of intervention. This represents a significant decrease ($t = 8.7$, p .0001) in the frequency of occurrence of the target behaviors (Pooley, 1976).

Another primary treatment objective is to coordinate existing resources in the delivery of comprehensive services to the child

and his family. Table 2 presents the resource agency and percentage of partial and total referrals that Pendleton makes to these resources in the delivery of services to the child and his family.

TABLE 2

Agencies Referred to	Partial* F	%	CF	CP	Total** F	%	CF	CP
1. Ches. School	2	.7	2	.7	1	2.4	1	2.4
2. Ches. Soc. Services	14	4.7	16	5.4	5	12.2	6	14.6
3. Ches. Juv. Court	0	0	16	5.4	0		6	14.6
4. Ches. Youth Bureau	0	0	16	5.4	1	2.4	7	17.0
5. Ches. Devel. Workshop	0	0	16	5.4	0		7	17.0
6. Va. Beach Schools	10	3.3	26	8.7	0		7	17.0
7. Va. Beach Soc. Services	17	5.7	43	14.4	11	26.8	18	43.8
8. Va. Beach Juv. Court	4	1.3	47	15.7	0		18	43.8
9. Va. Bch. Comp. Mental Hlth.	20	6.7	67	22.4	9	22.0	27	65.8
10. Public Health	37	12.4	104	34.8	0		27	65.8
11. Tidewater Rehab. Inst.	2	.7	106	35.5	0		27	65.8
12. Private Psychiatrist	11	3.7	117	39.2	0		27	65.8
13. Neurologist	2	.7	119	39.9	0		27	65.8
14. Priv. Psychologist	3	1.0	122	40.9	1	2.4	28	68.2
15. Private Physician	71	23.7	193	64.6	0		28	68.2
16. Norfolk & Chesa Comm. Mental Health	1	.3	194	64.9	0		28	68.2
17. Residential (non-Pendleton)	1	.3	195	65.2	2	4.9	30	73.1
18. Family Svc/Travelers Aid	14	4.7	209	69.9	2	4.9	32	78.0
19. Dental	66	22.1	275	92.0	0		32	78.0
20. Other	24	8.0	299	100.0	9	22.0	41	100.0

Partial N = 299
% = 36
Range 0-71

Total N = 41
% = 6
Range 0-11

*A partial referral to another agency is defined as a case being referred for a selected service (e.g., foster home placement) while Pendleton continues to work on the problem behaviors.

**A total referral to another agency is defined as a case being referred entirely to another resource for more appropriate services (e.g., family counseling).

TABLE 2 indicates 36% of cases were referred to other agencies for a selected service while Pendleton continued to work on the problem behaviors; 6% of the cases were referred to other resources for more appropriate services. This data indicates one effort to foster interagency cooperation in the delivery of services to the target population.

Of the 299 (36%) partial referrals, 58.9% (N = 176) were for health related problems; 10.4% (N = 31) were to the social service departments; 16.4% (N = 49) were for mental health counseling services; 1.3% (N = 4) were for juvenile court related services, including diversion unit services, and 4% (N = 12) were to other resources in the school system. As is apparent, more than half of the children referred have physical and/or dental needs that need immediate attention and that may play some role in the etiology of the child's acting out behavior.

Duration of Treatment

The diagnostic and treatment process requires on the average of 14.4 weeks for all cases. This rapid processing of cases is made possible by (1) the delimited target population (6-12 years old), (2) the nature of the directive, data oriented intervention procedures which focus on training "mediators" on the natural environment (Tharp & Wetzel, 1969; Pooley, 1977), and (3) an emphasis on low caseload (15 active cases at a time per full-time outclient worker)[1] and a high case processing rate (i.e., treatment duration guideline of three months per case). At this rate, an outclient worker can terminate five cases per month and open five new cases per month (note: three terminations, three new cases for volunteer coordinator) with a projected caseload of 396 referrals and 300 terminations annually.

[1]One worker functions as a volunteer coordinator one-third of the time and, therefore, has a caseload reduced by one-third

Is this low caseload-high flow rate delivery of service possible? Statistics on duration of treatment compiled from February, 1975 through September, 1976 indicate that it is. During this time period, the minimum caseload was 12 active cases at a time per worker[2] with the expectation of terminating 4 cases and opening 4 new cases per month. At that rate, an outclient treatment agent would work with 60 families per year and terminate 48 of them. The February, 1975 through September, 1976 statistics reveal that we are approaching that objective with 3.5 terminations per month for a total of 42 terminations per year per outclient treatment agent. During this same time period, the average duration of treatment for all referrals was 14.4 weeks. For those clients who received only outclient services, the duration of treatment averages 12.8 weeks. For those more serious cases that require both outclinet and residential or day care services, the duration of treatment was 23.2 weeks (Pooley, 1977, p. 12). These statistics, in combination with the treatment effectiveness data reported above, strongly suggest that the type of services Pendleton delivers are both effective and efficient.

Development of an Interagency/Interdisciplinary Outclient Service Delivery Team

The Pendleton Project outclient service delivery team (Project Services Team - PST) is comprised of eight workers who are employed

[2]It was increased to 15 cases per outclient worker as a result of a project evaluation completed in October, 1976 by Touche Ross & Company (Touche Ross & Company, 1976).

by a "parent" human service agency and assigned to the Pendleton Project. The following agencies deploy one staff member to the outclient team: Chesapeake Public Schools (Educational Specialist); Chesapeake Social Services Bureau (Social Worker); Chesapeake First District Juvenile Court Services (Probation Officer); Virginia Beach City Public Schools (Educational Specialist); Virginia Beach Department of Social Services (Social Worker); Virginia Beach Juvenile Court Services (Probation Officer); Comprehensive Mental Health Services of Virginia Beach (Psychiatric Social Worker); Virginia Beach Department of Public Health (Public Health Nurse). These staff members bring to the project different educational and work experience as well as a knowledge of services and resources available in their parent agency. This functional linkage between Pendleton and the parent agency facilitates quick access to those services and resources.

These staff members are hired by the parent agency and assigned to Pendleton . The applicants for the position are screened initially by the parent agency and the final selection is determined jointly by Pendleton and the parent agency. Of the 17 workers who have held positions on the outclient team since its inception in August, 1973, 7 (41%) have had prior experience in their parent agency. The other 10 staff members were hired specifically for the Pendleton position and, as a result, have had varying degrees of orientation to the parent agencies' services and resources. The worker's identification and familiarity with the parent agency is maintained by spending four hours per week at the parent agency in a variety of functions (e.g., keeping abreast of new developments in the agency, discussing current

and potential referrals, providing direct services, etc.). Those people who were hired specifically for Pendleton with no prior experience in the parent agency are definitely at a disadvantage in their relationship with the parent agency in terms of both working knowledge of agency services and acceptance by the parent agency staff as an employee of that agency. "I keep forgetting that you work for us" is a familiar comment to Pendleton staff members in this position. Our experience at Pendleton suggests that, if at all possible, experienced agency workers should be selected in the liaison position. When this is not feasible, it is our experience that the new Pendleton worker must assertively seek out acceptance by the parent agency staff by requesting a comprehensive and ongoing (e.g., staff meetings) orientation to the agency services and becoming directly involved in the agency activities (e.g., teaching, counseling, therapy activities) during the weekly four-hour period at the agency.

There are other rough spots in the area of personnel. For example, when treatment agents from various agencies and disciplines comprise a two-city outclient service, it is not cost efficient to assign one staff member of each agency to each case so that a comprehensive treatment approach can be implemented. At Pendleton, each outclient team member functions as a "case coordinator," i.e., he or she is responsible for seeing that the child and his family have access, either through direct service or referral, to the services deemed necessary. (The other outclient team members serve as consultants to the

case coordinator in developing a comprehensive treatment plan). The salary, fringe benefits, leave and holiday schedules are those of the parent agency, for this provides the formal linkage between Pendleton and the parent agency. Thus, while all outclient staff function as "case coordinators" on the same team, their salary (which is based on education, experience, supply and demand for workers in their profession) provides for a source of discontent among staff.

Another area of potential irritation is in the availability of promotions within the organization. At this early stage in its development, there is limited means of promotion for outclient workers within the Pendleton organization. Since two treatment supervisor positions are also interagency positions (e.g., outclient team supervisor is a clinical psychologist with Comprehensive Mental Health Services of Virginia Beach as a parent agency and the residential team supervisor is an educational psychologist position with Chesapeake Public Schools) promotions for outclient team members, at this point, necessitates leaving Pendleton and a return to the parent agency or a position with a new agency. On the other hand, because Pendleton services results in frequent contact with the other human service agencies in the public and private sector, a worker becomes acquainted with and familiar to a broad array of potential employers.

At this point, Pendleton attempts to minimize the potential discontent by explaining the advantages and disadvantages throughly during the prospective employee's initial interviews.

Summary and Conclusion

The Pendleton Project is an interagency/interdisciplinary program providing outclient, day treatment, and residential services to the cities of Chesapeake and Virginia Beach, Virginia. Its target population is 6 through 12 year old children who exhibit serious and persistent behavior problems. The objective of the project is to implement a comprehensive intervention program for the child by means of both direct treatment and referral to other appropriate resources in the community. Nine human service agencies participate financially and through staff deployment at various levels in the project: Management Board, internal management, Diagnostic Team, and direct treatment staff. Outclient services focus on counseling parents and teachers in alternative methods of child management. Intervention effectiveness is monitored by means of behavioral data. After three and one half years of operation, treatment success is 76% at termination of active intervention services with 58% of the children behaving acceptably at 12 month follow-up. This treatment effectiveness data, in combination with relatively short treatment time required, strongly support the use of intensive, closely monitored intervention procedure with this target population. The interagency participation in the project appears to have significant impact on treatment effectiveness, primarily by providing a broad orientation to potential factors which contribute to the child's problem (i.e., a wholistic approach), and by facilitating access to the appropriate resources. While

the interagency model at Pendleton creates problems in financial management and personnel matters and requires assertive public relations efforts for community acceptance, the treatment effectiveness data supports the continued utilization of this model of intervention. Of course, the full impact of intervention effectiveness will only be known with longitudinal follow-up.

APPENDIX A

I. TOTAL REFERRALS, August, 1973 to February 28, 1977

AGE	SEX		RACE			CHESAPEAKE AGENCIES							VIRGINIA BEACH AGENCIES							TREATMENT		TOTA
	Male	Fm	B	W	O	Sch	S.S.	Crt.	PH	MH	Par.	Oth.	Sch	S.S.	Crt.	PH	MH	Par.	Oth.	In	Out	
6	60	18	14	64	0	5	3	3	1	0	4	1	22	6	0	1	3	18	11	9	69	78
7	68	17	13	72	0	13	1	2	1	0	6	1	24	5	2	0	1	24	5	17	68	85
8	83	18	22	78	1	16	6	5	0	0	2	2	22	8	4	1	6	21	8	12	89	101
9	100	9	27	82	0	19	8	5	0	0	5	1	29	7	7	1	3	20	4	22	87	109
10	117	14	44	87	0	28	4	4	3	0	8	1	33	11	8	1	1	19	10	30	101	131
11	133	24	42	114	1	31	13	8	0	0	12	4	32	8	9	0	4	30	6	36	121	157
12	149	24	50	122	1	38	13	18	0	0	9	2	27	6	19	0	7	29	5	34	139	173
OT.	710	124	212	619	3	150	48	45	5	0	46	12	189	51	49	4	25	161	49	160	674	834

II. REFERRALS February 1 TO February 28

AGE	SEX		RACE			CHESAPEAKE AGENCIES							VIRGINIA BEACH AGENCIES							TREATMENT		TOTA
	Male	Fm	B	W	O	Sch	S.S.	Crt.	PH	MH	Par	Oth.	Sch	S.S.	Crt.	PH	MH	Par.	Oth.	In	Out	
6	2	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	2
7	5	0	0	5	0	0	0	0	0	0	2	0	2	0	0	0	0	1	0	0	5	5
8	7	1	2	6	0	1	1	0	0	0	0	0	1	0	0	0	0	3	1	0	8	8
9	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
10	3	0	2	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	3	3
11	7	0	3	4	0	2	0	0	0	0	0	1	3	0	0	0	0	1	0	0	7	7
12	2	1	0	3	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	3	3
OT.	26	3	8	21	0	5	1	1	0	0	2	3	9	1	0	0	1	5	1	0	29	29

III. TOTAL TERMINATIONS, August, 1973 TO February 28, 1977

AGE	SEX		RACE			CHESAPEAKE AGENCIES							VIRGINIA BEACH AGENCIES							TREATMENT		TOTAL
	Male	Fm	B	W	O	Sch	S.S.	Crt	PH	MH	Par	Oth	Sch	S.S.	Crt	PH	MH	Par	Oth.	In	Out	
6	45	16	14	47	0	5	3	2	1	0	3	1	16	4	0	1	2	15	8	6	55	61
7	54	12	11	55	0	13	1	2	1	0	4	1	15	4	2	0	1	19	3	12	54	66
8	70	14	19	65	0	15	5	5	0	0	2	2	20	5	5	1	6	16	2	11	73	84
9	96	6	26	76	0	18	7	6	0	0	4	0	28	6	5	1	3	20	4	20	82	102
10	107	13	39	81	0	27	4	4	3	0	7	1	29	9	8	1	1	19	7	29	91	120
11	112	22	35	98	1	25	10	10	0	0	12	3	24	8	8	0	4	24	6	25	109	134
12	136	22	46	111	1	32	13	17	0	0	8	2	24	6	17	0	6	30	3	29	129	158
OT.	620	105	190	533	2	135	43	46	5	0	40	10	156	42	45	4	23	143	33	132	593	725

Children in residence during the month: 12
Children in residence at the end of the month: 9

Children in day care during the month: 9
Children in day care at the end of the month: 4

Current Active Caseload: 109

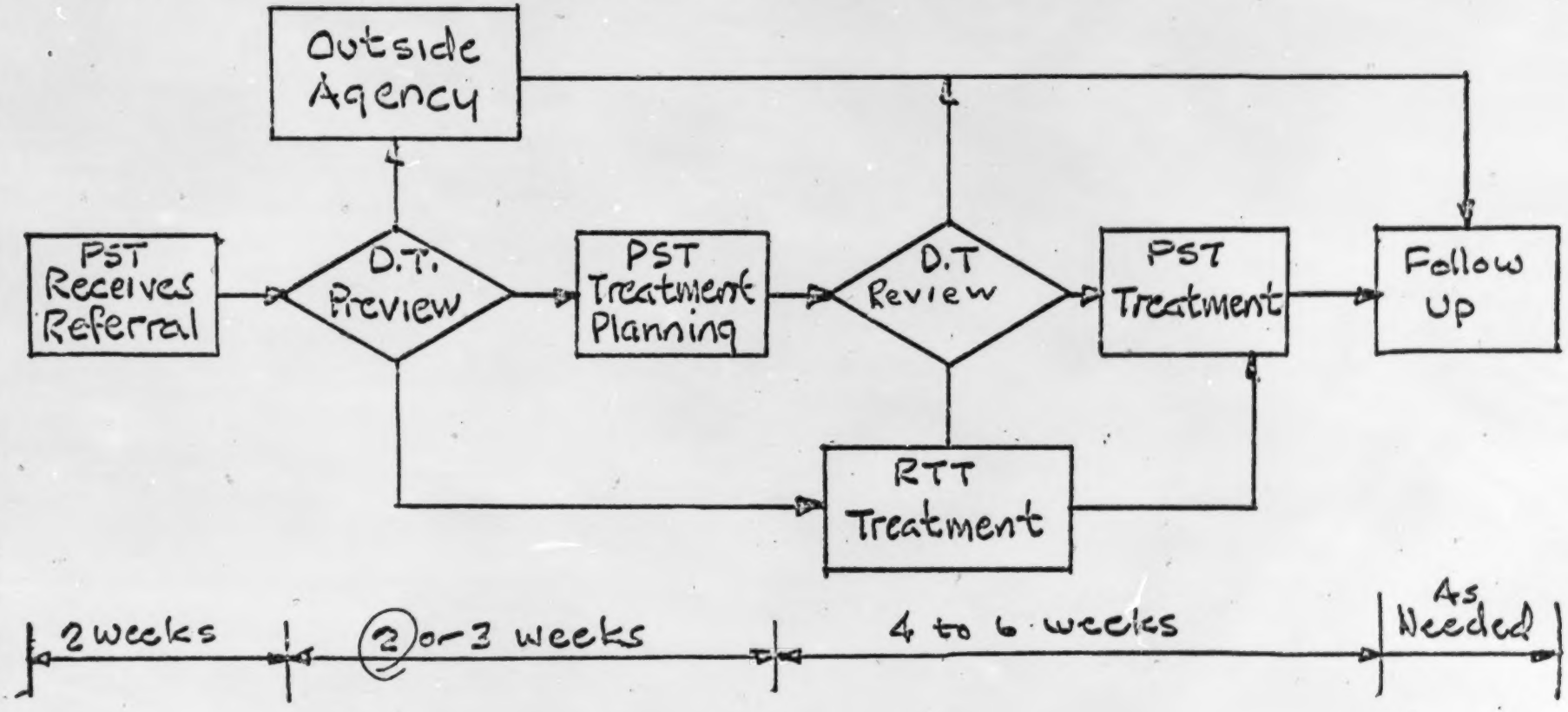
APPENDIX B

Pendleton Project Research Packet

1. Demographic Data Information Form (DEM)
2. Developmental Information Form (DEV)
3. Behavior Rating Scale - Parent (BEH)
4. Behavior Rating Scale - Teacher (BEH)
5. California Psychological Inventory (CPI) - Socialization Scale
6. Piers-Harris Self Concept Scale
7. Dotting Test
8. Writing X's Test

APPENDIX C

LEGEND: D.T. = Diagnostic Team
P.S.T. = Project Services Team.
R.T.T. = Residential Treatment Team.



Pendleton Project Diagnostic & Treatment Process

3-20-75 R.C.P.

APPENDIX D

Terminations

(August, 1973 - December 6, 1976)

Pendleton Code			No. of Cases
A	01	Change in behavior such that child is able to function adequately in the natural environment, including home and school.	324
B	02	Parents not interested in services at this time.	74
C	03	Parents unwilling to accept services after treatment program implemented.	72
D	04	School unwilling to accept services prior to implementation of treatment recommendations.	7
E	05	School unwilling to accept services after implementation of treatment program.	14
F	06	Referred to another agency for appropriate services.	42
G	07	Change of residence resulted in no further need for services for child.	4
H	08	Change in school placement resulted in no further need for services for child.	25
I	09	Parents located another resource.	28
J	10	Family moved outside Pendleton coverage area	23
K	11	Case referred but parents not following through	0
L	12	Inappropriate referral	31
M	13	Entered court system	3
N	14	Entered residential setting (non-Pendleton)	2
O	15	Tried everything but nothing worked	4

Termination and Follow-up

A treatment program is considered successful if the objectives determined jointly by the Pendleton treatment agent and the parent and/or teacher are met such that (1) the child is able to function acceptably in his natural environment (i.e., home and school), and (2) the parent or teacher has been taught procedures for managing the child constructively. Treatment data collected by parents and teachers, their verbal reports, and the treatment agent's opinion of treatment progress determine when the two criterion are satisfied.

$$\text{Success rate} = \frac{A}{A+C+D+E+M+N+O} = \frac{324}{324+72+7+14+3+2+4} = 76\%$$

Subsamples: For those cases that were terminated after participating only in the summer, 1974 day care program and the residential treatment program, the success rates are calculated below:

Summer, 1974 Day Care Program =

$$\frac{A}{A+C+D+E+M+N+O} = \frac{4}{4+4+0+0+0+0} = \frac{4}{8} = 50\%$$

PST-Residential-PST Treatment Sequence =

$$\frac{A}{A+C+D+E+M+N+O} = \frac{70}{70+10+0+0+10+2+1} = \frac{70}{83} = 84\%$$

PST-Day Care-PST Treatment Sequence (7/76 to present) =

$$\frac{A}{\substack{A+C+D+E+M+N+O \\ 15+4+0+0+0+0+1}} = \frac{15}{20} = 75\%$$

FOLLOW-UP CODES

(August, 1973 - November 30, 1976)

Pendleton Project Code			Number of Cases			
			1 month after termin.	5 months after term.	12 months after term.	24 months after term.
A	01	Child continues to function adequately in his/her environment.	297	193	102	14
B	02	Child exhibits the maladaptive behaviors for which he/she was originally referred at home.	59	30	19	5
C	03	Child exhibits the maladaptive behaviors for which he/she was originally referred at school.	61	73	44	8
D	04	Child exhibits maladaptive behaviors not originally identified as problems at home.	3	6	0	0
E	05	Child exhibits maladaptive behaviors not originally identified as problems at school.	3	2	0	1
F	06	Client exhibits no problem, but older siblings have begun exhibiting problems at home.	0	0	0	0
G	07	Client exhibits no problem, but older siblings have begun exhibiting problems at school.	0	0	0	0
H	08	Client exhibits no problem, but younger siblings have begun exhibiting problems at home.	0	0	0	0
I	09	Client exhibits no problem, but younger siblings have begun exhibiting problems at school.	0	1	0	0
J	10	Unable to contact family.	50	37	72	38
K	11	Unable to contact referrring agency	0	1	0	0
L	12	Case reopened.	21	33	23	2
M	13	Other (please specify)	8	8	0	1

(continued)

(Follow-up Codes continued)

Pendleton Project Code			Number of Cases			
			1 month after term.	5 months after term.	12 months after term.	24 months after term.
N	14	Entered court system.	9	12	12	4
O	15	Child has regressed, but behavior is still tolerable	7	12	5	0
P	16	Located another resource - school	1	4	0	0
Q	17	Located another resource - home	2	3	4	1

EFFECTIVENESS OF TREATMENT GAINS

AT FOLLOW-UP CONTACT

Percentage of cases in which child is behaving acceptably = $\frac{A+O}{A+B+C+D+E+M+N+O}$

1 month after termination = $\frac{297+7}{297+59+61+3+3+8+9+7} = \frac{304}{447} = 68\%$

5 months after termination = $\frac{193+12}{193+30+73+6+2+8+12+12} = \frac{205}{347} = 59\%$

12 months after termination = $\frac{102+5}{102+19+44+0+0+0+12+5} = \frac{107}{182} = 58\%$

24 months after termination = $\frac{14+0}{14+5+8+0+1+1+4+0} = \frac{14}{33} = 42\%$

References

Ayllon, T. & Roberts, M. Eliminating discipline problems by strengthening academic performance. Journal of Applied Behavior Analysis, 1974, 7, 71-76.

Bailey, J. S., Wolf, M. M., & Phillips, E. Home-based reinforcement and the modification of predelinquents' classroom behavior. Journal of Applied Behavior Analysis, 1970, 3, 223-233.

Bloomer, R. Classroom management by means of daily feedback to parents and home based contingencies. In R. C. Pooley, The Pendleton Project Semiannual Report. Virginia Beach: July, 1976.

Chapin, C. & Prizzio, P. Unpublished case studies: Jeff and Gregg, Virginia Beach: Pendleton Project, 1976.

Cunningham, W. A diagnostic/prescriptive model which might be used to match treatments to types of children displaying specific dysfunctional behaviors. Symposium presented at the annual meeting of the American Educational Research Association, New York, April, 1977.

Differential treatment...A way to begin. Washington, D. C.: Bureau of Prisons, 1970.

Dowling, J. Chairman of Pendleton Project Management Board. Personal Communication, 1973.

Eun, B., Pooley, R. C., & Shea, R. J. Residential treatment as an intensive care unit for behavior therapy. Symposium presented at the annual meeting of the American Educational Research Association, New York, April, 1977.

Eun, B., Shea, R. J., & Pooley, R. C. A reduction of target behavior frequency from baseline to last week of intervention. In R. C. Pooley, The Pendleton Project Semiannual Report. Virginia Beach, July, 1976.

Glueck, S. & Glueck, E. Unraveling Juvenile Delinquency. Cambridge, Mass.: Harvard University Press, 1950.

Goldiamond, I. A constructional approach to social problems: Ethical and constitutional issues raised. Behaviorism, 1974, 2 (1), p. 1-84.

Griffith, E. (Consultant to the Pendelton Project), Personal Communication, 1976.

Johnson, M. K. The case of Terry. In R. C. Pooley, The Pendleton Project Semiannual Report. Virginia Beach, January, 1977.

Kifer, R. E., Lewis, M. A., Green, D. R., & Phillips, E. L. Training predelinquent youths and their parents to negotiate conflict situations. Journal of Applied Behavior Analysis, 1974, 7, 357-364.

Pendleton Project Grant Application #71-A1054E submitted to the Commonwealth of Virginia, Division of Justice and Crime Prevention, Virginia Beach: December, 1973.

Pooley, R. C. A design for training. American Journal of Correction, 1969, 31 (2)

Pooley, R. C. Alternative approaches to treating children and families who exhibit behavior problems. Symposium presented at the annual meeting of the American Educational Research Association, New York, April, 1977.

Pooley, R. C. A management design for the delivery of interdisciplinary services to children in trouble. Paper presented at the annual meeting of the American Public Welfare Association, New Orleans: December, 1975.

Pooley, R. C. An integrated community based approach to the diagnosis and treatment of disturbing behaviors shown by children and families. A paper prepared for the National Council Crime and Delinquency: School Crime Project, 1977.

Pooley, R. C. The Pendleton Project Semiannual Report. Virginia Beach, July, 1974.

Pooley, R. C. The Pendleton Project Semiannual Report. Virginia Beach, January, 1977.

Rice, S. Unpublished case study - Franklin. Pendleton Project, 1976.

Schwartz, A. & Goldiamond, I. Social casework: A behavioral approach. New York: Columbia University Press, 1975.

Shea, R. J. & Prizzio, P. Analysis of Events form. Pendleton Project, 1975.

Shows, A. Classroom wide intervention program: The Good Behavior Game. In R. C. Pooley, The Pendleton Project Semiannual Report, Virginia Beach, July, 1976.

Skinner, B. F. About Behaviorism. New York: Alfred A. Knopf, 1974.

Tharp, R. G. & Wetzel, R. J. Behavior Modification in the Natural Environment. New York: Academic Press, 1969.

Thoresen, C. E. & Anton, J. L. Intensive counseling. Focus on Guidance, 1973, 6 (2)

Touche Ross & Company. The Pendleton Project: Management review final report. October, 29, 1976.

Patterson, G. & Guillon, M. Living with Children: New methods for parents and teachers. Champaign, Ill.: Research Press, 1968.

Prizzio, P. Behavior management by teaching parents to analyze situations behaviorally. In R. C. Pooley, The Pendleton Project Semiannual Report. Virginia Beach, July, 1976.